

effect, tightened inspection shall be instituted when two out of five consecutive portions of production have been rejected.

(4) *Tightened inspection to normal inspection.* When tightened inspection is in effect, normal inspection shall be re-instituted when five consecutive portions of production have been considered acceptable.

(c) When the rules require a switch in the inspection status because of one or more classes of defects, all classes of defects shall be inspected under the new inspection criteria. At the option of the user of the service, and when approved by the Administrator, such user may elect to remain on normal inspection when qualified for reduced inspection, or on tightened inspection when qualified for normal inspection.

**§ 42.136 Applicability of other procedures.**

When appropriate, the procedures for classifying and recording defects in § 42.106 and for appeal inspections in § 42.108 also apply to on-line sampling and inspection.

**Subpart E—Miscellaneous**

AUTHORITY: Agricultural Marketing Act of 1946, as amended (7 U.S.C. 1621 *et seq.*).

**§ 42.140 Operating Characteristic (OC) curves for on-line sampling and inspection.**

(a) This section contains the Operating Characteristic (OC) curve for each of the sampling plans given in Tables I, I-A, II, II-A, III, and III-A. The OC curve and the corresponding sampling plans are listed by AQL.

(b) Different acceptance and rejection criteria are provided for each AQL. The criteria for each AQL must be obtained from the applicable sampling plan tables.

(c) The curves show the ability of the various sampling plans to distinguish between good and bad lots. This can be illustrated by examining OC curve 6 for an AQL of 0.25 defects per hundred units in the Reduced and Normal Inspection Plans. If the quality of the lots submitted for inspection is poorer than the AQL of 0.25 defects per hundred units, fewer lots will be accepted.

For example, OC curve 6 shows that when the quality of lots submitted for inspection is 1.0 defects per hundred units, only 26 percent of the lots are expected to be accepted. Conversely when the quality of the lots submitted for inspection is better than the AQL of 0.25 defects per hundred units, most lots are expected to be accepted. For example, the same OC curve 6 shows that when the quality of lots submitted for inspection is 0.10 defects per hundred units, about 99 percent of the lots are expected to be accepted.

(d) The table of sampling plans that correspond to OC curve 6 can be found over the curves for an AQL of 0.25 defects per hundred units in the Reduced and Normal Inspection Plan. An examination of this table reveals that there is one single and one double sampling plan that have OC curves comparable to OC curve 6. The first plan listed is a single plan requiring the inspection of 500 individual containers. Under this plan the lot is accepted as meeting the requirements for an AQL of 0.25 if there are 3 or less defects in the sample or rejected if there are 4 or more defects in the sample.

(e) The next plan that is listed in the column headed 6 for an AQL of 0.25 is a double sampling plan that requires the initial inspection of 228 individual containers. The lot will be accepted as meeting the requirements of an AQL of 0.25 if there are no defects in the sample, and rejected if there are 3 or more defects in the sample. In the event that the number of defects is between the acceptance (0) and rejection (3) numbers, additional containers must be inspected. In this case, the table indicates that a total of 516 containers must be inspected before a decision can be made to either accept or reject the lot. This will require the inspection of 288 more containers ( $516 - 228 = 288$ ).

If there are 3 or less defects in the total sample, the lot will be accepted. If there are 4 or more defects in the total sample, the lot will be rejected. The other double sampling plans operate in a similar manner with the only differences being the sample sizes and acceptance and rejection numbers.